

## WHAT IS CLAIMED IS:

1/ A hinge mechanism for a vehicle seat, said hinge mechanism comprising:

5 first and second cheek plates mounted to pivot relative to each other about a common pivot axis, the second cheek plate being provided with a first set of teeth forming at least an arc of a circle centered on the pivot axis;

10 N locking members, each of which is provided with a second set of teeth having an angular pitch identical to the angular pitch of the first set of teeth, each locking member being mounted to move on the first cheek plate between firstly an active position in which the second set of teeth of each locking member is in engagement with  
15 the first set of teeth of the second cheek plate so as to prevent the first and second cheek plates from moving relative to each other, and secondly a retracted position in which the second set of teeth of each locking member does not co-operate with the first set of teeth of the  
20 second cheek plate so as to enable the first and second cheek plates to pivot relative to each other;

N guides secured to the first cheek plate, each guide being associated with a locking member and serving to guide said locking member with operating clearance,  
25 said locking member following an axis of displacement that is substantially rectilinear between the active and the retracted positions; and

a control device adapted to place the N locking members either in the active position, or in the  
30 retracted position;

wherein (N-1) guides are disposed in a manner such that the (N-1) locking members that are associated with them move along (N-1) respective axes of displacement that coincide with (N-1) radial directions which  
35 intersect the pivot axis, and wherein the last guide is disposed in a manner such that the locking member that is associated with it moves along an axis of displacement

that is parallel to and offset relative to a radial direction that intersects the pivot axis.

2/ A mechanism according to claim 1, in which the (N-1)  
5 radial directions associated with the (N-1) guides and the radial direction parallel to the axis of displacement of the last guide are uniformly angularly distributed about the pivot axis.

10 3/ A mechanism according to claim 1, in which the radial direction and the axis of displacement that are mutually parallel and that are associated with the last guide are separated by a distance greater than the operating clearance existing between said last guide and the  
15 locking member that is associated therewith.

4/ A mechanism according to claim 1, in which the radial direction and the axis of displacement that are mutually parallel and that are associated with the last guide are  
20 separated from each other by a distance no greater than the distance between two adjacent teeth in the first set of teeth of the second cheek plate.

5/ A mechanism according to claim 1, in which the control  
25 device comprises:

a rotary cam which is resiliently urged towards a rest position in which said cam places each locking member in the active position; and

a control plate which is secured to the cam and  
30 which covers each locking member at least in part, said control plate being provided with cutouts adapted to co-operating with projecting pegs provided on each locking member in a manner such as to move each locking member simultaneously towards the retracted position when the  
35 cam is moved into an actuating position.

6/ A vehicle seat comprising a seat proper and a seat back mounted to pivot relative to the seat proper by means of at least one hinge mechanism according to claim 1.